

# Endocervical polyps as ethiological factors in infertility

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## Abstract

Endometrial polyps are often seen as benign lesions in reproductive age women. Usually, it is recommended the resection of such polyps in infertile patients before starting any treatment or assisted reproductive pregnancy programs. Our study was based on 25 cases of endocervical polyposis who reported for infertility between 2015-2018 at Santerra Medical Center Constanta from Romania. Patients were both clinically and paraclinically in normal limits. Furthermore, the results of sexual partner sperm counts were within normal limits. Diagnosis of endocervical polyps was established after their extraction and referral to the histopathological examination. The results showed that the percentage of pregnancies obtained at 1 year without the use of any other fertility product was 72%, sustaining the resection of the polyps idea for the further positive fertilization.

**Keywords:** endometrial polyps, lesions, resection, fertility

## Introduction

Many endometrium abnormalities like polyps or leiomyoma could disturb early implantation and further the continuation of a healthy pregnancy<sup>(1,2)</sup>. It is believed that more than 3% women present uterine-associated infertility<sup>(3,4)</sup>, in which lesions such as polyps can have an important role in fertilization process<sup>(5)</sup>.

In the present study, it is showed the importance of the endometrial polyps resection in infertile women.

## Methods

The study was achieved on 25 patients of endocervical polyposis who reported infertility between 2015 and 2018 at Santerra Medical Center Constanta from Romania. All patients under study had unprotected sex for at least 12 months, at least 2 times a week, without using any other means of contraception.

Patients were both clinically and paraclinically (i.e. ultrasound and vaginal secretion including PAP exam) within normal limits. The results of partner sperm counts were within normal limits.

Diagnosis of endocervical polyps was established after their extraction and referral to the histopathological examination. The extraction was performed both by simple torsion in the case of the low cervical location or hysteroscopic in the case of those with high endocervical localization.

## Results

The number of pregnancies occurred in these patients was analyzed in 3 months, 6 months, and 12 months after the resection of the polyps. After 3 months, the percentage of pregnancies was 20%<sup>(5)</sup>, and at 6 months 44%<sup>(11)</sup>. The percentage of pregnancies obtained after 12 months without the use of any other fertility product was

72% (18 out of 25). All the patients reported that during this period (i.e. after polyps ablation) they had regular sexual activity, at least twice a week and monitored ovulation using urine tests and vaginal ultrasounds.

## Discussions

Cervical causes represent between 5% and 10% of the causes of female infertility<sup>(6,7)</sup>. Hysteroscopy is the method that combines the imaging and the operative part. It is useful in most cases of infertility. In the case of endocervical polyps, remove the polyp, checking the implantation base, then continue exploring the uterine cavity<sup>(7)</sup>. Uterine polyps may be cause of infertility, especially when they are located at the tubal ostiums level<sup>(8)</sup>. They may also be etiological factors for abnormal uterine bleeding<sup>(8)</sup>.

Differential diagnosis with other causes of uterine bleeding such as those in the anovulatory cycles must be considered<sup>(9,10)</sup>. They can act as a valve preventing the evacuation of the blood from the uterine cavity, which can lead to abnormal uterine bleeding. The literature also considers them as etiological factors of abnormal uterine bleeding<sup>(10-12)</sup>.

Surgical removal of endocervical polyps can relieve the patient of much more expensive interventions, such as artificial insemination or *in vitro* fertilisation increasing the probability of pregnancy<sup>(12-15)</sup>.

## Conclusions

We believe that endocervical polyps are important factors in the production of female infertility, mainly by their valve action, which does not allow the sperm to ascend to the uterine cavity, so in most cases their simple surgical removal can solve the problem of infertility. The present study support this idea, the important

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percentage of pregnancies obtained at 1 year after the extraction of polyps was 72%. ■

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